OM protein - protein search, using sw model

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                    GenCore version 5.1.3
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Run on:      January 17, 2003, 19:34:37    Search time 0.8486 Seconds
                                           (without alignments)
                                           28.011 Million cell updates/sec

Title:           US-09-856-070-23
Perfect score:   55
Sequence:        1 ELMLRLQQYEE 11

Scoring table:   BLOSUM62
                 Gapop 10.0 , Gapext 0.5

Searched:        908470 seqs, 133256520 residues

Total number of hits satisfying chosen parameters:     408170

Minimum DB seq length:    0
Maximum DB seq length:    2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :       A_Geneseq_101002.*
   1:   /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1980.DAT.*
   2:   /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1981.DAT.*
   3:   /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1982.DAT.*
   4:   /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1983.DAT.*
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  20:   /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1999.DAT.*
  21:   /SIDS2/gcgdata/geneseq/geneseqp-embl/AA2000.DAT.*
  22:   /SIDS2/gcgdata/geneseq/geneseqp-embl/AA2001.DAT.*
  23:   /SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002.DAT.*
```

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	55	100.0	11	22	AAB82039	Human hepreceptor
2	55	100.0	12	22	AAB82038	Human hepreceptor
3	55	100.0	13	22	AAB82037	Human hepreceptor
4	55	100.0	34	22	AAB82022	Human hepreceptor
5	55	100.0	436	22	AAG73954	Human colon cancer
6	55	100.0	586	20	AAY27443	Amino acid sequence
7	55	100.0	622	22	AAU30004	Novel human secret
8	55	100.0	635	21	AAB53356	Human colon cancer
9	47	85.5	52	22	AAU33050	Novel human secret
10	41	74.5	27	20	AAY27444	Arbennapedia inter

```
  11   40  73.7   344   22  ABG29165   Novel human diagno
  12   39  70.9    57   22  ABB39680   Peptide #7186 enco
  13   39  70.9    57   22  AAM68296   Human brain express
  14   39  70.9    57   22  AAM33032   Human bone marrow
  15   39  70.9    57   22  AAM33256   Peptide #7293 enco
  16   39  70.9    57   23  ABG42876   Human peptide enco
  17   39  70.9   429   22  ABG19048   Novel human diagno
  18   39  70.5   475   22  AAG74841   Human colon cancer
  19   39  70.9   802   22  AAC19045   Novel human diagno
  20   39  70.9  2645   22  ABG29077   Novel human diagno
  21   37  67.3    21   23  AAC89857   Insulin/insulin-li
  22   36  65.5   284   21  AAG30197   Arabidopsis thalia
  23   36  65.5   284   21  AAG49452   Arabidopsis thalia
  24   36  65.5   293   21  AAG30196   Arabidopsis thalia
  25   36  65.5   293   21  AAG49451   Arabidopsis thalia
  26   36  65.5  1200   21  AAB19313   Amino acid sequence
  27   35  63.6   445   22  AAH68491   Drosophila melanog
  28   35  63.6   892   22  AAG58171   Alpha-actinin prot
  29   34  61.8   176   21  AAG28279   Arabidopsis thalia
  30   34  61.8   176   21  AAG43041   Arabidopsis thalia
  31   34  61.8   186   21  AAG20278   Arabidopsis thalia
  32   34  61.8   186   21  AAG43040   Arabidopsis thalia
  33   34  61.8   186   21  AAG53829   Arabidopsis thalia
  34   34  61.8   280   21  AAG53828   Arabidopsis thalia
  35   34  61.8   333   21  AAG20277   Arabidopsis thalia
  36   34  61.8   333   21  AAG43039   Arabidopsis thalia
  37   34  61.8   333   21  AAG53827   Arabidopsis thalia
  38   34  61.8   333   22  AAB98669   Rice photosensitiv
  39   34  61.8   333   23  AAO15492   Beta vulgaris case
  40   34  61.8   333   23  AAM52836   Physcomitrella pat
  41   34  61.8   405   11  AAP08119   CDX, a MILA involv
  42   34  61.8   405   22  AAB13752   GDP Fuc beta-D-Gal
  43   34  61.8   405   12  AAB14464   Protein 7.2 (1.3-f
  44   34  61.8   495   13  AAB28810   Hela cell fucosylt
  45   34  61.8   405   15  AAB45937   A glycosyltransfer
```

ALIGNMENTS

```
RESULT 1
AAB82039
ID   AAB82039 standard, peptide; 11 AA.
XX
AC   AAB82039;
XX
DT   13-JUN-2001  (first entry)
XX
DE   Human hepreceptor domain A binding peptide Rupe2232.
XX
KW   Human, hepreceptor, cytostatic, anti-HIV, antibiotic;
KW   neurtropic, humans test; tissue induces, cells, infectious diseases, cancer;
KW   HIV-related dementia.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified site   9
FT                   /note= "Optionally phosphorylated"
XX
PN   GB235424l-A.
XX
PD   21-MAR-2001.
XX
FF   17 SEP 1999, 99GB 9921881.
XX
FF   17 SEP 1999, 99GB 9921881.
XX
PA   (HOLM/) HOLMS R D.
XX
PI   Holms RD;
XX
DR   WPI; 2001 292287/31.
```

```
XX
PT   Novel regulatory or unfolding peptides of ezrin that binds to
PT   Hepreceptor, useful for inducing immune response for treating
PT   infectious diseases and cancer -
XX
PS   Claim 37; Page 37; 42pp; English.
XX
CC   The hepreceptor is a novel active site in human ezrin. Ezrin regulates
CC   the structure of the cortical cytoskeleton to control cell surface
CC   topography. The present invention relates to peptides (see AAB82021 to
CC   AAB82041) that bind to hepreceptor with greater affinity than HEP1 (see
CC   AAB82046). The hepreceptor binding peptides are useful for inducing
CC   immune response, and for treating infectious diseases, cancer and
CC   HIV-related dementia. The present peptide binds to domain A of the
CC   hepreceptor (AAB82019).
XX
SQ   Sequence   11 AA;

Query Match             100.0%;  Score 55;  DB 22;  Length 11;
Best Local Similarity   100.0%;  Pred No. 0.0043;
  Matches  11;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy    1 ELMLRLQDYEE 11
         |||||||||||
Db    1 ELMLRLQDYEE 11

RESULT 2
AAB82038
ID   AAB82038 standard; peptide; 12 AA.
XX
AC   AAB82038;
XX
DT   14-JUN-2001 (first entry)
XX
DE   Human hepreceptor domain A binding peptide Hupe2132.
XX
KW   Human; hepreceptor; cytostatic; anti-HIV; antibiotic;
KW   nootropic; immune response inducer; ezrin; infectious diseases; cancer,
KW   HIV related dementia.
XX
OS   Homo sapiens.
XX
FH   Key            Location/Qualifiers
FT   Modified-site  10
FT                  /note= "optionally phosphorylated"
XX
PN   GB2354241-A.
XX
PD   21-MAR-2001.
XX
PF   17-SEP-1999;  99GB-0021881.
XX
PR   17-SEP-1999;  99GB-0021881.
XX
PA   (HOLM/) HOLMS R D.
XX
PI   Holms RD;
XX
DR   WPI; 2001-293287/31.
XX
PT   Novel regulatory or unfolding peptides of ezrin that binds to
PT   Hepreceptor, useful for inducing immune response for treating
PT   infectious diseases and cancer -
XX
PS   Claim 24; Page 46; 42pp; English.
XX
CC   The hepreceptor is a novel active site in human ezrin. Ezrin regulates
CC   the structure of the cortical cytoskeleton to control cell surface
CC   topography. The present invention relates to peptides (see AAB82021 to
CC   AAB82041) that bind to hepreceptor with greater affinity than HEP1 (see
CC   AAB82046). The hepreceptor binding peptides are useful for inducing
CC   immune response, and for treating infectious diseases, cancer and
```

```
CC   HIV related dementia. The present peptide binds to domain A of the
CC   hepreceptor (AAB82019).
XX
SQ   Sequence   12 AA;

Query Match             100.0%;  Score 55;  DB 22;  Length 12;
Best Local Similarity   100.0%;  Pred No. 0.0047;
  Matches  11;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy    1 ELMLRLQDYEE 11
         |||||||||||
Db    2 ELMLRLQDYEE 12

RESULT 3
AAB82037
ID   AAB82037 standard; peptide; 13 AA.
XX
AC   AAB82037;
XX
DT   13-JUN-2001 (first entry)
XX
DE   Human hepreceptor domain A binding peptide Hupe2032.
XX
KW   Human; hepreceptor; cytostatic; anti-HIV; antibiotic;
KW   nootropic; immune response inducer; ezrin; infectious diseases; cancer;
KW   HIV-related dementia.
XX
OS   Homo sapiens.
XX
FH   Key            Location/Qualifiers
FT   Modified-site  11
FT                  /note= "optionally phosphorylated"
XX
PN   GB2354241-A.
XX
PD   21-MAR-2001.
XX
PF   17-SEP-1999;  99GB-0021881.
XX
PR   17-SEP-1999;  99GB-0021881.
XX
PA   (HOLM/) HOLMS R D.
XX
PI   Holms RD;
XX
DR   WPI; 2001-293287/31.
XX
PT   Novel regulatory or unfolding peptides of ezrin that binds to
PT   Hepreceptor, useful for inducing immune response for treating
PT   infectious diseases and cancer -
XX
PS   Claim 22; Page 36; 42pp; English.
XX
CC   The hepreceptor is a novel active site in human ezrin. Ezrin regulates
CC   the structure of the cortical cytoskeleton to control cell surface
CC   topography. The present invention relates to peptides (see AAB82021 to
CC   AAB82041) that bind to hepreceptor with greater affinity than HEP1 (see
CC   AAB82046). The hepreceptor binding peptides are useful for inducing
CC   immune response, and for treating infectious diseases, cancer and
CC   HIV related dementia. The present peptide binds to domain A of the
CC   hepreceptor (AAB82019).
XX
SQ   Sequence   13 AA;

Query Match             100.0%;  Score 55;  DB 22;  Length 13;
Best Local Similarity   100.0%;  Pred No. 0.0051;
  Matches  11;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy    1 ELMLRLQDYEE 11
         |||||||||||
Db    3 ELMLRLQDYEE 13
```

RESULT 4
AAB82020
ID   AAB82020 standard; peptide; 34 AA.
XX
AC   AAB82020;
XX
DT   13-JUN-2001 (first entry)
XX
DE   Human hepreceptor domain B.
XX
KW   Human; hepreceptor domain B, cytostatic; anti-HIV; antibiotic;
KW   nootropic, immune response inducer, ezrin, infectious diseases, cancer;
KW   HIV-related dementia.
XX
OS   Homo sapiens.
XX
FH   Key   Location/Qualifiers
FT   Modified-site 14
FT   /note- "optionally phosphorylated"
XX
PN   GR235424?-A.
XX
PD   21-MAR-2001.
XX
PF   17-SEP-1999;   99GB-0021881.
XX
PR   17-SEP-1999;   99GB-0021881.
XX
PA   (HOLM/) HOLMS R D.
XX
PI   Holms RD;
XX
DR   WPI; 2001:293287/41
XX
PT   Novel regulatory or unfolding peptides of ezrin that binds to
PT   hepreceptor, useful for inducing immune response for treating
PT   infectious diseases and cancer
XX
PS   Claim 5; Page 36; 42pp; English.
XX
CC   The present sequence is domain B of human hepreceptor of human ezrin, the
CC   hepreceptor is a novel active site in human ezrin. Ezrin regulates the
CC   structure of the cortical cytoskeleton to control cell surface
CC   topography. The present invention relates to peptides (see AAB82021 to
CC   AAB82041) that bind to hepreceptor with greater affinity than IBEP1 (see
CC   AAB82046). The hepreceptor binding peptides are useful for inducing
CC   immune response, and for treating infectious diseases, cancer and
CC   HIV-related dementia. The present sequence assembles into two
CC   anti-parallel helices with hepreceptor domain A (see AAB82047).
XX
SQ   Sequence   34 AA;

Query Match   100.0%; Score 55; DB 22; Length 34;
Best Local Similarity 100.0%; Pred No. 0.014;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy   1 ELMRLRLQDYEE 11
         |||||||||||
Db   6 ELMRLRLQDYEE 16

RESULT 5
AAG73954
ID   AAG73954 standard; Protein; 436 AA.
XX
AC   AAG73954;
XX
DT   03-SEP-2001 (first entry)
XX
DE   Human colon cancer antigen protein SEQ ID NO:4718.
XX
KW   Human; colon cancer; colon cancer antigen; diagnosis; detection;
KW   colorectal carcinoma.
XX
OS   Homo sapiens.
XX
PN   WO200124929-A2.
XX
PD   05-APR-2001.
XX
PF   28-SEP-2000; 2000WO-US26524.
XX
PR   29-SEP-1999;   99US-0157137;
PR   03-NOV-1999;   99US-0163280;
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Ruben SM, Barash SC, Birse CE, Rosen CA;
XX
DR   WPI; 2001:235357/24.
DR   N-PSDB; AAH33385.
XX
PT   Nucleic acids encoding 4277 human colon cancer-associated polypeptides,
PT   useful for preventing, diagnosing and/or treating colorectal cancers -
XX
PS   Claim 11; Page 6520-6521; 9803pp; English.
XX
CC   AAH42943 to AAH37195 and AAG73514 to AAG77788 represent human colon
CC   cancer-associated nucleic acid molecules (N) and proteins (P), where
CC   the proteins are collectively known as colon cancer antigens. The colon
CC   cancer antigens have cytostatic activity and can be used in gene
CC   therapy and vaccine production. N and P may be used in the prevention,
CC   diagnosis and treatment of diseases associated with inappropriate P
CC   expression. For example, N and P may be used to treat disorders
CC   associated with decreased expression by rectifying mutations or deletions
CC   in a patient's genome that affect the activity of P by expressing the
CC   inactive proteins or to supplement the patients own production of P.
CC   Additionally, N may be used to produce the colon cancer-associated Ps,
CC   by inserting the nucleic acids into a host cell and culturing the cell
CC   to express the proteins. N and P can be used in the prevention, diagnosis
CC   and treatment of colorectal carcinomas and cancers. AAH37196 to AAH37204
CC   and AAB77789 represent sequences used in the exemplification of the
CC   present invention.
CC   N.B. tags 500 to 682 and pgs. 7654 of the sequence listing were
CC   missing at time of publication, meaning no sequences are present for
CC   SEQ ID NO:1627 to 1052, 7923 and 7922.
XX
SQ   Sequence   436 AA;

Query Match   100.0%; Score 55; DB 22; Length 436;
Best Local Similarity 100.0%; Pred No. 0.18;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy   1 ELMRLRLQDYEE 11
         |||||||||||
Db 196 ELMRLRLQDYEE 206

RESULT 6
AAY27443
ID   AAY27443 standard; protein; 586 AA.
XX
AC   AAY27443;
XX
DT   26-NOV-1999 (first entry)
XX
DE   Amino acid sequence of human ezrin polypeptide.
XX
KW   pharmaceutical; ezrin; mutant; tumor; metastasis; human.
XX
OS   Homo sapiens.
XX
FH   Key   Location/Qualifiers
FT   Misc-difference 354
FT   /note- "the Tyr at this position can be mutated

PT (preferably to a Phe) to construct an
PT ezrin mutant of the invention"
XX
PN WO9947150-A2.
XX
PD 23-SEP-1999.
XX
PF 18-MAR-1999; 99WO-EP02054.
XX
PR 18-MAR-1998; 98US-0040725.
XX
PA (CURI) INST CURIE.
PA (CNRS) CNRS CENT NAT RECH SCI.
XX
PI Arpin M, Crepaldi I, Gautreau A, Louvard D;
XX
DR WPI; 1999-561851/47.
XX
PT New composition for prevention and treatment of tumors and metastasis
PT -
PS Example 1; Fig 1; 31pp; English.
XX
CC The invention provides a pharmaceutical composition containing ezrin
CC protein, RNA or DNA mutated on tyrosine 353, or a functional fragment
CC or derivative of the ezrin mutant. The new composition is useful for
CC prevention and/or treatment of tumors, and especially metastasis. The
CC present sequence represents the amino acid sequence of human ezrin
CC (before the maturation by deletion of the first amino acid Met).
XX
SQ Sequence   586 AA;

Query Match   100.0%; Score 55; DB 20; Length 586;
Best Local Similarity   100.0%; Pred. No. 0.25;
Matches 11; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 ELMLRLQDYEE 11
         |||||||||||
Db 346 ELMLRLQDYEE 356

RESULT 7
AAU30004
ID AAU30004 standard; Protein; 622 AA.
XX
AC AAU30004;
XX
DT 18-DEC-2001 (first entry)
XX
DE Novel human secreted protein #495.
XX
KW Human; vaccination; gene therapy; nutritional supplement;
KW stem cell proliferation; haematopoiesis; nerve tissue regeneration;
KW immune suppression; immune stimulation; anti-inflammatory; leukaemia.
XX
OS Homo sapiens.
XX
PN WO200174449-A2.
XX
PD 25-OCT-2001.
XX
PF 16-APR-2001; 2001WO-US08656.
XX
PR 18-APR-2000; 2000US-0552929.
PR 26-JAN-2001; 2001US-0770160.
XX
PA (HYSE) HYSEQ INC.
XX
PI Tang YT, Lin C, Drmanac R...;
XX
DR WPI; 2001-611725/73.
XX
PT Nucleic acids encoding a range of human polypeptides, useful in genetic

PT vaccination, testing and therapy -
XX
PS Claim 20; Page 219; 765pp; English.
XX
CC The invention relates to novel human secreted polypeptides, the
CC polypeptides and antibodies to the polypeptides are useful for
CC determining the presence of or predisposition to a disease associated
CC with altered levels of polypeptide. The polypeptides are also useful for
CC identifying agents (atonists and antagonists) that bind to them. Cells
CC expressing the proteins are useful for identifying a therapeutic agent
CC for use in treatment of a pathology related to aberrant expression or
CC physiological interactions of the polypeptide. Vectors comprising
CC the nucleic acids encoding the polypeptides and cells genetically
CC engineered to express them are also useful for producing the proteins.
CC The proteins are useful in genetic vaccination, testing and
CC therapy, and can be used as nutritional supplements. They may be used to
CC increase stem cell proliferation; to regulate haematopoiesis; and in
CC bone, cartilage, tendon and/or nerve tissue growth or regeneration;
CC immune suppression and/or stimulation; as anti-inflammatory agents; and
CC in treatment of leukaemias. AAU29510-AAU33304 represent the amino acid
CC sequences of novel human secreted proteins of the invention.
XX
SQ Sequence   622 AA;

Query Match   100.0%; Score 55; DB 22; Length 622;
Best Local Similarity   100.0%; Pred. No. 0.26;
Matches 11; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 ELMLRLQDYEE 11
         |||||||||||
Db 382 ELMLRLQDYEE 392

RESULT 8
AAB53356
ID AAB53356 standard; Protein; 635 AA.
XX
AC AAB53356;
XX
DT 09-MAR-2001 (first entry)
XX
DE Human colon cancer antigen protein sequence SEQ ID No.896.
XX
KW Human; colon cancer; colon cancer antigen; diagnosis; detection;
KW identification; cytostatic; cardioactive; neuroprotective; vulnerary;
KW immunomodulatory; muscular; gynaecological; gastrointestinal;
KW nephrotropic; antiinfective; antibacterial; gene therapy; wound;
KW neural disorder; immune system disorder; muscular disorder;
KW reproductive disorder; gastrointestinal disorder; renal disorder;
KW infectious disease; cardiovascular disorder.
XX
OS Homo sapiens.
XX
PN WO200055351-A1.
XX
PD 21-SEP-2000.
XX
PF 08-MAR-2000; 2000WO-US05883.
XX
PR 12-MAR-1999; 99US-0124270.
XX
PA (HUMA) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2000-587534/55.
DR N-PSDB; AAC98113.
XX
PT Colon cancer associated gene sequences, referred to as colon cancer
PT antigens, useful for the treatment, prevention, and diagnosis of colon
PT disorders such as colon cancer -
XX
PS Claim 11; Page 1449-1451; 2104pp; English.

XX
CC AAC97991 to AAC98763 encode the human colon cancer associated proteins,
CC called human colon cancer antigens, given in AAB53234 to AAB54006. The
CC human colon cancer antigens can have cytostatic, cardioactive, muscular;
CC neuroprotective, immunomodulatory, gynaecological, gastrointestinal,
CC vulnerary, nephrotropic, antiinfective and antibacterial activities, and
CC can be used in gene therapy. The colon cancer antigen polynucleotides,
CC proteins and antibodies to the proteins are useful for the prevention,
CC treatment and diagnosis of colon disorders, such as colon cancer. The
CC polynucleotides may be used in diagnostics and research, such as for
CC chromosome identification, and as hybridisation probes. The proteins
CC may also be used to prevent diseases such as neural disorders, immune
CC system disorders, muscular disorders, reproductive disorders,
CC gastrointestinal disorders, wounds, renal disorders, infections
CC diseases, and cardiovascular disorders AAC98764 to AAC98772 and
CC AAB54007 represent sequences used in the exemplification of the present
CC invention.
XX
SQ Sequence   635 AA;

Query Match   100.0%; Score 55; DB 21; Length 635;
Best Local Similarity 100.0%; Pred No. 0.27;
Matches   11; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 ELMLRLQDYEE 11
        |||||||||||
Db 395 ELMLRLQDYEE 405

RESULT 9
AAU33060
ID   AAU33060 standard; Protein; 52 AA.
XX
AC   AAU33060;
XX
DT   18-DEC-2001 (first entry)
XX
DE   Novel human secreted protein #3551.
XX
KW   Human; vaccination; gene therapy; nutritional supplement;
KW   stem cell proliferation; haematopoiesis; nerve tissue regeneration;
KW   immune suppression; immune stimulation; anti-inflammatory; leukaemia.
XX
OS   Homo sapiens.
XX
PN   WO200179449-A2.
XX
PD   25-OCT-2001.
XX
PF   16-APR-2001; 2001WO-US008656.
XX
PR   18-APR-2000; 2000US-0559924.
PR   26-JAN-2001; 2001US-0770160.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT, Liu C, Drmanac RT;
XX
DR   WPI; 2001-611725/70.
XX
PT   Nucleic acids encoding a range of human polypeptides, useful in genetic
PT   vaccination, testing and therapy -
XX
PS   Claim 20, Page 762, 765pp, English.
XX
CC   The invention relates to novel human secreted polypeptides. The
CC   polypeptides and antibodies to the polypeptides are useful for
CC   determining the presence of or predisposition to a disease associated
CC   with altered levels of polypeptide. The polypeptides are also useful for
CC   identifying agents (agonists and antagonists) that bind to them. Cells
CC   expressing the proteins are useful for identifying a therapeutic agent
CC   for use in treatment of a pathology related to aberrant expression or
CC   physiological interactions of the polypeptide. Vectors comprising

CC   the nucleic acids encoding the polypeptides and cells genetically
CC   engineered to express them are also useful for producing the proteins.
CC   The proteins are useful in genetic vaccination, testing and
CC   therapy, and can be used as nutritional supplements. They may be used to
CC   increase stem cell proliferation, to regulate haematopoiesis; and in
CC   bone, cartilage, tendon and/or nerve tissue growth or regeneration;
CC   immune suppression and/or stimulation, as anti inflammatory agents, and
CC   in treatment of leukaemias. AAU29510 AAU33304 represent the amino acid
CC   sequences of novel human secreted proteins of the invention.
XX
SQ   Sequence   52 AA;

Query Match   85.5%; Score 47; DB 22; Length 52;
Best Local Similarity 66.4%; Pred No. 0.44;
Matches   12; Conservative   3; Mismatches   2; Indels   1; Gaps   0;

Qy   1 ELMLRLQDYEE 11
        |||| |||||
Db   14 ELMLRLQDYEE 24

RESULT 10
AAY27444
ID   AAY27444 standard; peptide; 27 AA.
XX
AC   AAY27444;
XX
DT   26-NOV-1999 (first entry)
XX
DE   Antennapedia internalization sequence in tandem with ezrin fragment.
XX
KW   Pharmaceutical; ezrin, mutant, tumor, antennapedia internalization;
KW   metastasis; human.
XX
OS   Synthetic.
XX
FH   Key   Location/Qualifiers
FT   Modified-site 1
FT   /note= "biotinylated"
FT   Modified site 22
FT   /note= "optionally phosphorylated"
XX
PN   WO9947150-A2.
XX
PD   23-SEP-1999.
XX
PF   18-MAR-1999; 99WO-EP02054.
XX
PR   18-MAR-1998; 98US-0040725.
XX
PA   (CURI-) INST CURIE.
PA   (CNRS-) CNRS CENT NAT RECH SCI.
XX
PI   Arpin M, Crepaldi T, Gautreau A, Louvard D;
XX
DR   WPI; 1999-561851/47.
XX
PT   New composition for prevention and treatment of tumors and metastasis
XX
PS   Example 5; Page 14; 31pp; English.
XX
CC   The invention provides a pharmaceutical composition containing ezrin
CC   protein, RNA or DNA mutated on tyrosine 353, or a functional fragment
CC   or derivative of the ezrin mutant. The new composition is useful for
CC   prevention and/or treatment of tumors, and especially metastasis. The
CC   present sequence represents an antennapedia internalization sequence in
CC   tandem with an ezrin fragment (residues 348-358). This is used in
CC   experiments of p85 interaction with phosphorylated ezrin peptides.
XX
SQ   Sequence   27 AA;

Query Match   74.5%; Score 41; DB 20; Length 27;

```
Best Local Similarity  100.0%;  Pred. No. 2.7;
Matches   8;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy      4 LRLQDYEE 11
          ||||||||
Db     17 LRLQDYEE 24

RESULT 11
ABG29165
ID  ABG29165 standard; Protein; 444 AA.
XX
AC  ABG29165;
XX
DT  13-FEB-2002  (first entry)
XX
DE  Novel human diagnostic protein #29156.
XX
KW  Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW  food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS  Homo sapiens.
XX
PN  WO200175067-A2.
XX
PD  11-OCT-2001.
XX
PF  10-MAR-2001; 2001WO-US009631.
XX
PR  11-MAR-2000; 2000US-0540417.
PR  24-AUG-2000; 2000US-0640167.
XX
PA  (HYSE ) HYSEQ INC.
XX
PI  Drmanac RT, Liu C, Tang YT;
XX
DR  WPI; 2001-634462/73.
DR  N-PSDB; AAS94452.
XX
PT  New isolated polynucleotide and encoded polypeptides, useful in
PT  diagnostics, forensics, gene mapping, identification of mutations
PT  responsible for genetic disorders or other traits and to assess
PT  biodiversity.
XX
PS  Claim 20; SEQ ID NO 54524; 101pp; English.
XX
CC  The invention relates to isolated polynucleotide (I) and
CC  polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC  polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC  and gene mapping, and in recombinant production of (II). The
CC  polynucleotides are also used in diagnostics as expressed sequence tags
CC  for identifying expressed genes. (I) is useful in gene therapy techniques
CC  to restore normal activity of (II) or to treat disease states involving
CC  (II). (II) is useful for generating antibodies against it, detecting or
CC  quantitating a polypeptide in tissue, as molecular weight markers and as
CC  a food supplement. (II) and its binding partners are useful in medical
CC  imaging of sites expressing (II). (I) and (II) are useful for treating
CC  disorders involving aberrant protein expression or biological activity.
CC  The polypeptide and polynucleotide sequences have applications in
CC  diagnostics, forensics, gene mapping, identification of mutations
CC  responsible for genetic disorders or other traits to assess biodiversity
CC  and to produce other types of data and products dependent on DNA and
CC  amino acid sequences. AHG00010-AHG30377 represent novel human
CC  diagnostic amino acid sequences of the invention.
CC  Note: The sequence data for this patent did not appear in the printed
CC  specification, but was obtained in electronic format directly from WIPO
CC  at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ  Sequence  444 AA;

Query Match            72.7%;  Score 49;  DB 22;  Length 344;
Best Local Similarity  80.0%;  Pred. No. 53;
Matches   8;  Conservative   1;  Mismatches   1;  Indels   0;  Gaps   0;
```

```
Qy      1 ELMLRLQDYE 10
          |||| ||||
Db    279 ELMLRQKDYE 288

RESULT 12
ABB39680
ID  ABB39680 standard; Peptide; 57 AA.
XX
AC  ABB39680;
XX
DT  04-FEB-2002  (first entry)
XX
DE  Peptide #7186 encoded by human foetal liver single exon nucleic acid probe.
XX
KW  Human; foetal liver; gene expression; single exon nucleic acid probe.
XX
OS  Homo sapiens.
XX
PN  WO200157277-A2.
XX
PD  09-AUG-2001.
XX
PF  30-JAN-2001; 2001WO-US000669.
XX
PR  04-FEB-2000; 2000US-0180412.
PR  26-MAY-2000; 2000US-0207456.
PR  30-JUN-2000; 2000US-0608408.
PR  03-AUG-2000; 2000US-0632366.
PR  21-SEP-2000; 2000US-0234687.
PP  27-SEP-2000; 2000US-0236359.
PR  04-OCT-2000; 2000GB-0024263.
XX
PA  (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI  Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR  WPI; 2001-483447/52.
XX
PT  Human genome-derived single exon nucleic acid probes useful for
PT  analyzing gene expression in human fetal liver -
PT
XX
PS  Claim 27; SEQ ID NO 32315; 639pp + sequence listing; English.
XX
CC  The invention relates to a single exon nucleic acid probe for
CC  measuring human gene expression in a sample derived from human foetal
CC  liver. The single exon nucleic acid probes may be used for predicting,
CC  measuring and displaying gene expression in samples derived from human
CC  fetal liver. The present sequence is a peptide encoded by a single exon
CC  nucleic acid probe of the invention.
CC  Note: The sequence data for this patent did not form part of the
CC  printed specification, but was obtained in electronic format directly
CC  from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ  Sequence  57 AA;

Query Match            70.9%;  Score 39;  DB 22;  Length 57;
Best Local Similarity  72.7%;  Pred. No. 14;
Matches   8;  Conservative   2;  Mismatches   1;  Indels   0;  Gaps   0;
```

```
Qy      1 ELMLRLQDYEE 11
          ||||||:||
Db     18 ELMLRLQEYFE 28

RESULT 13
AAM60396
ID  AAM60396 standard; Protein; 57 AA.
XX
AC  AAM60396;
XX
DT  05-NOV-2001  (first entry)
```

```
XX
DE   Human brain expressed single exon probe encoded protein SEQ ID No: 44448
XX
KW   Human; brain expressed exon; gene expression analysis; probe;
KW   microarray, Alzheimer's disease; multiple sclerosis; schizophrenia;
KW   epilepsy; cancer.
XX
OS   Homo sapiens.
XX
PN   WO200157275-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00667.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   04-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR   WPI; 2001-488446/52.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   brains -
XX
PS   Example 4; SEQ ID NO: 32501; 650pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   brain. They can be used to measure gene expression in brain cell samples,
CC   which may enable the diagnosis and improved treatment of nervous system
CC   diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC   epilepsy and cancers. The present sequence is a protein encoded by one of
CC   the probes of the invention.
XX
SQ   Sequence   57 AA;

  Query Match             70.9%;  Score 39;  DB 22;  Length 57;
  Best Local Similarity   72.7%;  Pred. No. 13;
  Matches    8;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 ELMLRLQYEE 11
              ||:||||:||
Db         18 ELIRLQEYFE 28

RESULT 14
AAM73032
ID   AAM73032 standard; Protein; 57 AA.
XX
AC   AAM73032;
XX
DT   06-NOV-2001 (first entry)
XX
DE   Human bone marrow expressed probe encoded protein SEQ ID No: 44448
XX
KW   Human; bone marrow expressed exon; gene expression analysis; probe;
KW   microarray, cancer; leukaemia; lymphoma; myeloma.
XX
OS   Homo sapiens.
XX
PN   WO200157276-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00668.
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XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   04-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR   WPI; 2001-488900/53.
XX
PT   Human genome derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human bone marrow -
XX
PS   Example 4, SEQ ID NO: 33338, 658pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   bone marrow. They can be used to measure gene expression in bone marrow
CC   samples, which may enable the improved diagnosis and treatment of cancers
CC   such as lymphoma, leukaemia and myeloma. The present sequence is a
CC   protein encoded by one of the probes of the invention.
XX
SQ   Sequence   57 AA;

  Query Match             70.9%;  Score 39;  DB 22;  Length 57;
  Best Local Similarity   72.7%;  Pred. No. 13;
  Matches    8;  Conservative    8;  Mismatches    2;  Indels    1;  Gaps    0;

Qy          1 ELMLRLQYEE 11
              ||:||||:||
Db         18 ELIRLQEYFE 28

RESULT 15
AAM33256
ID   AAM33256 standard; Protein; 57 AA.
XX
AC   AAM33256;
XX
DT   17-OCT-2001 (first entry)
XX
DE   Peptide #7293 encoded by probe for measuring placental gene expression.
XX
KW   Probe; microarray; human; placenta; antenatal diagnosis;
KW   genetic disorder.
XX
OS   Homo sapiens.
XX
PN   WO200157272-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00663.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   04-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR   WPI; 2001-488897/53.
XX
```

PT Human genome derived single exon nucleic acid probes useful for
PT analyzing gene expression in human placenta -
XX
PN Claim 27; SEQ ID No 33525; 654pp; English.
XX
CC The present invention relates to single exon nucleic acid probes (SENP;
CC see AA131315-AA157546). The present sequence is a peptide encoded by one
CC such probe. The probes are useful for producing a microarray for
CC predicting, measuring and displaying gene expression in samples derived
CC from human placenta. The probes are useful for antenatal diagnosis of
CC human genetic disorders.
XX
SQ Sequence 57 AA;

Query Match   70.9%; Score 49; DB 22; Length 57;
Best Local Similarity 72.7%; Pred. No. 13;
Matches   8; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy   1 ELMLRLQDYFE 11
      ||:||||:|:|
Db   18 ELILRLQEYFE 28

Search completed: January 16, 2003, 16:49:15
Job time : 52.3286 secs